

ABSTRACT OF THE DISCLOSURE

In a master block, the exponential conversion characteristic is determined on the basis of a common mode reference voltage and a reference voltage. In a  
5 slave block, the exponential conversion characteristic determined with the master block is used to create a control voltage and a gain control signal on the basis of a common mode reference voltage and a reference  
10 voltage. For example, a gain of the variable gain amplifier is controlled by using this gain control signal.